

VIII.3.3-LIST-FTW FORT WORTH TABULAR TIME SERIES OUTPUT OPERATION

Identifier: LIST-FTW

Operation Number: 27

Parameter Array: The FORTRAN identifier used for the parameter array is PO. The contents of the PO array are:

| <u>Position</u> | <u>Type</u> | <u>Contents</u> |
|-----------------|-------------|---|
| 1 | I*4 | Operation version number |
| 2 | I*4 | Number of words in PO array |
| 3 | I*4 | Number of title lines |
| 4 | I*4 | Number of time series to print |
| 5 | I*4 | New page option: 0 = do not begin output on a new page 1 = begin output on a new page |
| 6 | I*4 | Number of columns to use for print |
| 7 | R*4 | 4-character flag used to mark the end of previous hydrologic days |
| 8 | R*4 | 4-character flag used to mark the last computational day and hour |
| 9 | R*4 | 4-character flag used to mark the end of future hydrologic days |
| 10-11 | R*4 | Rating curve identifier (blank if no Rating Curve information is to be printed along with the data) |
| 12 | I*4 | Number of blank lines to print in between time series |
| 13-22 | I*4 | Relative line number after which a blank line will be printed |
| 23-30 | I*4 | Unused |
| 31-48 | R*4 | First title line to be printed |

For each title line 18 spaces are used in the PO array. The second title line is stored immediately after the first, etc.

Beginning at the location $IPT=30+(\text{num_title_lines}*18)$ the following positions are repeated for each time series:

| <u>Position</u> | <u>Type</u> | <u>Contents</u> |
|-----------------|-------------|---|
| IPT+1-IPT+2 | R*4 | Time series identifier |
| IPT+3 | R*4 | Time series data type |
| IPT+4 | I*4 | Time series data time interval |
| IPT+5 | I*4 | Time series print time interval |
| IPT+6 | I*4 | Option to not print missing data: 0 = print missing data 1 = do not print missing data |
| PT+7 | R*4 | User identifier to print with time series |
| IPT+8 | I*4 | Number of ordinates into the future to print (based on the time series print interval) |
| IPT+9 | I*4 | Number of digits to the right of the decimal to print |
| IPT+10 | I*4 | Number of digits to the left of the decimal to print |
| IPT+11 | I*4 | Time series print control type: 0 = always print if print output is warranted 1 = print this time series only if at least one value exceeds the print criteria and print output is warranted 2 = a control time series - if the time series does not have at least one data value above the print criteria, no print output is generated for the entire Operation |
| IPT+12 | I*4 | Volume output option: 0 = express volume as acre-feet or cubic meters 1 = express volume as flow for a unit of time Data values are converted using this expression: data=data*24/(print_time_interval) |
| IPT+13 | R*4 | Criteria or limit value if needed |
| IPT+14 | I*4 | Units of criteria value input: 0 = English units input 1 = Metric units input |
| IPT+15 | R*4 | Metric units code |
| IPT+16 | R*4 | English unit code |
| IPT+17 | R*4 | Multiplication conversion factor to convert from Metric to English |
| IPT+18 | R*4 | Offset value to go from Metric to English |

Position Type Contents

Carryover Array: This Operation has no carryover.

Subroutines Names and Functions: Subroutines associated with this Operation are:

Subroutine Function

| | |
|-------|---|
| PIN27 | Input cards and stores values in the PO array |
| PRP27 | Print information on the PO array |
| EX27 | Execute the Operation |
| PUC27 | Punch cards with information from the PO arrays which may be used as input to the PIN routine |
| TAB27 | Make entries into the Operations Table |

Subroutines PIN27, PRP27 and PUC27 have the standard argument lists for these routines as described in Section VIII.4.3.

SUBROUTINE EX27 (PO,IP,D)

Function: This is the execution subroutine for Operation LIST-FTW.

Argument List:

| <u>Variable</u> | <u>Input/ Output</u> | <u>Type</u> | <u>Dimension</u> | <u>Description</u> |
|-----------------|--------------------------|-------------|------------------|--|
| PO | Input | R*3 | Variable | Contains parameters and other information |
| IP | Input | I*4 | Variable | Contains pointers to the beginning location in the D array of each time series to be printed (pointers are in the same order as the time series information is listed in the PO array) |
| D print | Input | R*4 | Variable | Array of time series data to |

SUBROUTINE TAB27
(TO,LEFT,IUSET,NXT,LPO,PO,TS,MTS,NWORK,NDD,LWORK,IDT)

Function: This is the Operations Table entry subroutine for
Operation ?OPNAME?.

Argument List: The arguments for this subroutine are similar to the
arguments for the Operations Table entry subroutines for other
Operations. A description of the arguments is contained in section
VIII.4.2-TAB.

Operation Table Array: The contents of the TO array are:

| <u>Position</u> | <u>Contents</u> |
|-----------------|---|
| 1 | Operation number |
| 2 | Location of next Operation in T array |
| 3 | Location of parameters in P array |
| 4 | Location of Rating Curve identifier in P array: 0 = none used |
| 5 | Minimum time interval of any time series |
| 6 to 5+NTS | Location of each time series in the D array (NTS is total number of time series) |